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(54) SYSTEM AND PROCESS FOR VCR SCHEDULING

SYSTEM UND VERFAHREN ZUR PROGRAMMIERUNG EINES VCR

SYSTEME ET PROCEDE DE PROGRAMMATION D'UN MAGNETOSCOPE A CARTOUCHE

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Description

BACKGROUND OF THE INVENTION

1. Field of the Invention:

The present invention further relates generally to a system and process in which television supplemental data is embedded in a televised broadcast and, on cue, the viewer can store the supplemental data. Such supplemental data can include schedule information, such as time, channel, program name and program type. The stored data is used to program a VCR automatically for recording a supplemental televised program as defined by the schedule information.

2. Description of the Prior Art:

The above-referenced related patent describes a system and process which allows user selection of broadcast programs from schedule information for presentation to a television set and/or recording by a VCR. The prior art discussed in that patent and of record in its application shows a variety of systems and processes for increasing the functionality of a television set and/or a VCR.

While a number of such systems and processes are known in the art, see for instance WO-A-8 804 507 and GB-A-2 207 314, none of these systems and processes deal with a way to provide supplemental information about material being broadcast to a viewer. An example of such supplemental information that would be of substantial interest to certain viewers is further information on a product that is advertised during a regular broadcast. Such commercial time is very expensive, particularly during prime time or televised sporting events with very large audiences, so that commercials have a typical length of from 30 seconds to one minute. For many advertised products, viewers need more information than can be provided during the commercials on, for example, features, prices and local availability before they make a decision to purchase the product. The ability to provide such supplemental information selectively to viewers who desire it would be of substantial value to advertisers and other suppliers of televised information.

SUMMARY OF THE INVENTION

Accordingly, it is an object of this invention to provide a system and process which will allow a viewer to select interactively to receive supplemental information related to material in a television broadcast.

It is another object of the invention to provide such a system and process which will provide the supplemental information for recording when broadcast time is inexpensive.

It is a further object of the invention to provide such a system and process which will allow viewers to select

supplemental information from a menu.

It is another object of the invention to provide a VCR schedule controller that provides an improved index of recorded material on a tape.

5 The attainment of these and related objects may be achieved through use of the novel system and process for provided in accordance with claims 1, 10 and 18. A system and process for VCR scheduling in accordance with this invention has a recording device, a broadcast receiver and a data processor connected to the recording device and to the broadcast receiver. The data processor includes means for presenting a cue on the broadcast receiver during the broadcast. A means is connected to the data processor for receiving a user response to the cue. A means responsive to the user response to the cue controls the recording device to record the supplemental information.

A process for presenting supplemental information about a broadcast in accordance with the invention includes providing a cue during a broadcast indicating the availability of supplemental information relating to the broadcast. A response to the cue is received from the user. The supplemental information is supplied to the user after receiving the cue response from the user. 20 Preferably, the supplemental information is broadcast at a later time. Schedule information for the supplemental information is provided with the broadcast. The schedule information is stored after the user response to the cue and used to record the supplemental information with a recording device when the supplemental information is broadcast.

This apparatus allows supplemental information to be delivered to the viewer selectively, at a time that is beneficial and convenient for broadcasters, and retrieved by the viewer in a prompt and convenient way. 35 One method of sending supplemental data is using the video blanking interval (VBI) segment of the video signal to carry teletext-formatted data. A teletext receiver-based apparatus is used to decode the supplemental data.

The cue may be a caption on the screen, an audio signal or message, an indicator on the apparatus, or anything that can alert the viewer. The cue may be generated selectively by the apparatus, based on the content 40 of the supplemental data received, or the cue may be contained in the normal televised video picture or sound. The viewer responds to the cue by pushing a key on a remote controller, by a switch on the apparatus, by making a loud sound, or by any other means that will activate the system to store the supplemental data in memory.

When the viewer successfully stores the data on cue, the system may issue an acknowledgement. This may be another caption, an audio signal or message, or anything else to inform the viewer that the response to the cue has been entered. The system will then automatically tune the VCR to the scheduled channel and time defined by the supplemental data.

The attainment of the foregoing and related objects,

advantages and features of the invention should be more readily apparent to those skilled in the art, after review of the following more detailed description of the invention, taken together with the drawings, in which:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a block diagram of a system for VCR scheduling in accordance with the invention.

Figure 2 is a block diagram of another system for VCR scheduling in accordance with the invention.

DETAILED DESCRIPTION OF THE INVENTION

Turning now to the drawings, more particularly to Figure 1, there is shown a block diagram of an integrated VCR schedule controller in accordance with the invention. In this embodiment, the controller is provided built into a VCR, but it can also be provided separate from the VCR, such as by using the remote facility of the VCR to provide inputs to the VCR.

Broadcast data is received over antenna 1 or cable 2 by a programmable tuner 3, which has an output connected to input 14 of a teletext receiver 4. The teletext receiver may be a Sears Caption Decoder. The output of the teletext receiver 4 is connected to a microprocessor 5. Microprocessor output 11 is connected to a video display generator 10, used to create text for television receiver 60. Video switcher 15 connects the display generator 10 output 17 to the TV receiver 60 to display a message from the microprocessor 5.

The microprocessor 5 has a random access memory 9 and a system clock/calendar 6. After processing the embedded data, the microprocessor 5 generates a cue by outputting a symbol or message to the display generator 10 for display on TV receiver 60. Remote control receiver 20 receives a command from a remote controller 22 from a viewer input in response to the cue. Remote control receiver 20 is connected to an input line 21 and supplies a control signal to cause the microprocessor to store the embedded data in memory 9. The microprocessor then issues a message to the display generator 10 as an acknowledgement of the viewer input.

The cue can be implemented in many ways other than through the microprocessor 5. The simplest is an audio or visual stimulus that is part of the sound or video portion of the broadcast. In this case, both the display generator 10 and the video switcher 15 are unnecessary. The provision of the cue separate from the sound or video portion of the broadcast, such as in the VBI, which is then added to the sound or video portion of the signal provided to the TV receiver 60 by the microprocessor, is not distracting to viewers without the system of this invention.

The microprocessor 5 monitors the system clock 6 and compares it with the stored schedules from the embedded supplemental data. When the system time corresponds to one of the scheduled times, the microproc-

essor 5 sets the programmable tuner 3 to the stored channel and initiates recording on VCR 30 by a control signal on line 32. The VCR receives its signal from antenna 35 or cable 36.

5 In addition to obtaining schedule information as part of a broadcast, in a system 90 as shown in Figure 2, the schedule information can be received by a computer 5 using a modem 94 and processed by the computer 5. Based on user selections, one or more program schedule listings is stored in computer memory. At the time of the broadcasts, the computer 5 activates a VCR 30 for recording of the selected programs. Serial output port 32 of the computer 5 connects to a control bus of the VCR 30 to turn on the VCR, control channel selection and enable recording of the program.

The system 90 incorporates a feature for automatically converting television guide station listings to channel selections for cable users. To eliminate need to convert station listings to local channel numbers each time the VCR 30 is to be programmed for unattended recording, a memory is provided so that the user only needs to enter the conversion once. After that, the conversion is handled by the computer 5. An entry table is provided on-screen requesting the user to enter a cable channel number corresponding to each station name or number. Alternatively, both the station name or number and the cable number may be read from a bar-code conversion guide, using a bar-code reader. In either method, the conversion data is stored in a table in memory. During unattended recording, the channel number corresponding to the station name is used by the computer 5 to control channel selection on the VCR 30. With such a conversion stored locally in the system 90, cable schedule information can be supplied under cable channel names (e.g., ESPN) on a regional or national basis and selection of the appropriate local channel number for that cable service made by the controller 90.

The system 90 uses electronic indexing for automatic retrieval of programs. During recording, the location of the program is identified by a capstan counter with a digital readout. This index information identifying where a program to be recorded is stored into a log along with the name of the program. During playback, the VCR 30 will automatically go to the indexed location and start playback.

Line 101 from the VCR 30 is a serial bus containing the index data. It is connected to a serial input port of the computer 5. Search is made by comparing the present index value and the stored index value. Search is completed when the index value from the VCR 30 matches the stored index value.

The system 90 also provides self-indexed cassette recordings. At the start of each cassette tape, a complete description of the start and end positions of every program recorded on the cassette is stored along with the program names. During playback, this information is read by the teletext decoder of the VCR 30 and presented on the screen, allowing the user to identify quick-

ly what is recorded and to access the desired program automatically. Access is made by name selection from the log.

During recording, a complete log is created for each tape as described above. Before the tape is removed from the VCR 30, the tape is rewound to the start, and the log information is recorded onto video blanking interval (VBI) tracks of the tape using a VBI data encoder 110 of the type described in my above-referenced issued patent. Line 102 is a serial output from the computer 5 to the VBI encoder 110 and line 103 is the video signal with the embedded log information connecting to the video input port of the VCR 30. While the log information is recorded, the VCR 30 receives its signals from the antenna input 35 to the video input.

During playback, a VBI teletext decoder 108 receives data from the VCR on line 107, which is the video output port of VCR 30. After decoding, the data is received on line 106 by computer 5 on a second input port. Other than as shown and described, the construction and operation of the Figure 2 embodiment of the invention is the same as that of the Figure 1 embodiment.

Further details on implementing systems of this invention are available in my above-referenced issued patent.

It should now be apparent to those skilled in the art that a novel VCR schedule system and process capable of achieving the stated objects of the invention has been provided. The system and process allows interactive selection by a viewer of further information related to information being broadcast, which may be made with a menu selection. The further information can be broadcast for recording by a viewer at a different time, when broadcast time is less costly and/or underutilized.

It should further be apparent to those skilled in the art that various changes in form and details of the invention as shown and described may be made within the scope of the claims appended hereto.

Claims

1. A system to allow interactive selection for presentation to a user of supplemental broadcast information pertaining to a primary broadcast, the system comprising a recording device (30), a broadcast receiver (60), a data processor (5) connected to said recording device (30) and to said broadcast receiver (60), characterized in that the system is to allow interactive selection for presentation to a user of supplemental broadcast information pertaining to a primary broadcast in which a cue is broadcast at a first time with, and in addition to, a program comprising the primary broadcast, the system being characterized by said data processor including means responsive to the cue for presenting the cue on the broadcast receiver (60) during and simultaneous with presenting the primary broadcast on the

receiver (60), the cue indicating the availability at a second time later than the first time of the supplemental broadcast information; means (20) connected to the data processor for receiving a user response to the cue, and means (6, 5, 32) responsive to the received cue response for controlling said recording device (30) to record the supplemental broadcast information at the second time.

5 2. The system of claim 1 in which schedule information for the supplemental broadcast information is provided with the primary broadcast, the system being characterized in that said data processor (5) is configured to store the schedule information in response to the received cue response and to use the schedule information to record the supplemental broadcast information with said recording device (30) when the supplemental broadcast information is broadcast.

10 3. The system of claim 2 further characterized in that said recording device (30) is a video cassette recorder and said broadcast receiver (60) is a television set.

15 4. The system of claim 1 further characterized in that said data processor (5, 10) is configured to provide acknowledgement to the user of the received cue response.

20 5. The system of claim 1 further characterized in that said data processor (5, 10) is configured to provide a menu display to the user in response to the received cue response and to receive user menu selections.

25 6. The system of claim 1 further characterized in that said system includes means (5, 9, 30) for creating and storing an index of recorded material.

30 7. The system of claim 6 further characterized in that said system includes means (5, 9, 30) for recording the index on a tape including the recorded material.

35 8. The system of claim 1 additionally comprising a memory (9) coupled to said data processor (5), said data processor (5) being configured to store information identifying a local channel number on which a cable channel is supplied in said memory (9).

40 9. The system of claim 1 in which the primary broadcast is an advertisement and the supplemental broadcast information is further details about the subject of the advertisement.

45 55 10. A process to allow interactive selection for presentation to a user of supplemental broadcast information pertaining to a primary broadcast in which a cue

is broadcast during and in addition to the primary broadcast at a first time, the process comprising the steps of: receiving the cue and presenting the cue to the user on a broadcast receiver (60) during, and simultaneous with showing of the primary broadcast, the cue indicating the availability at a second time later than the first time of the supplemental broadcast information; receiving a response to the cue from the user and reacting to the received cue response to receive the supplemental broadcast information at the second time.

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11. The process of claim 10 further characterized in that schedule information for the supplemental broadcast information is provided with the primary broadcast, and the step of reacting to the received cue response comprises storing the schedule information and using the schedule information to record the supplemental broadcast information with a recording device when the supplemental broadcast information is broadcast.

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12. The process of claim 10 further characterized by providing acknowledgement to the user of the received cue response.

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13. The process of claim 10 wherein the step of reacting to the received cue response includes the steps of providing a menu display to the user in response to the received cue response, receiving user menu selections, and receiving the supplemental broadcast information in accordance with the user menu selections.

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14. The process of claim 10 further characterized by creating and storing an index of recorded material.

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15. The process of claim 14 further characterized by recording the index on a tape including the recorded material.

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16. The process of claim 10 additionally comprising the steps of receiving a user input identifying a local channel number on which a cable channel is supplied and storing the local number on which a cable channel is supplied.

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17. The process of claim 10 in which the broadcast is an advertisement and the supplemental information is further details about the subject of the advertisement.

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18. A system to allow interactive selection for presentation to a user of supplemental broadcast information pertaining to a primary broadcast, the system comprising, a broadcast receiver (60), a data processor (5) connected to said recording device (30) and to said broadcast receiver (60), characterized in that the system is to allow interactive selection for presentation to a user of supplemental broadcast information pertaining to a primary broadcast in which a cue is broadcast at a first time with, and in addition to, a program comprising the primary broadcast; wherein said data processor including means for presenting the cue on the broadcast receiver (60) during and simultaneous with presenting the primary broadcast on the receiver (60), the cue indicating the availability at a second time later than the first time of the supplemental broadcast information; means (20) connected to the data processor for receiving a user response to the cue, and means (6, 5) for reacting to the received cue response to receive the supplemental broadcast information at the second time.

Patentansprüche

1. System, das einem Benutzer von Sendungszusatzinformation, die eine Primärsendung betrifft, eine interaktive Wahl zur Präsentation erlaubt, wobei das System aufweist eine Aufzeichnungsvorrichtung (30), einen Sendungsempfänger (60), einen Datenprozessor (5), der an die Aufzeichnungsvorrichtung (30) und den Sendungsempfänger (60) angeschlossen ist, dadurch **gekennzeichnet**, daß das System eine interaktive Wahl zur Präsentation von Sendungszusatzinformation, die eine Primärsendung betrifft, an einen Benutzer erlaubt, wobei in der Primärsendung ein Hinweiszeichen zu einem ersten Zeitpunkt mit und zusätzlich zu einem Programm, das die Primärsendung umfaßt, gesendet wird, wobei das System dadurch **gekennzeichnet** ist, daß der Datenprozessor Mittel aufweist, die auf das Hinweiszeichen an sprechen, um das Hinweiszeichen am Sendungsempfänger (60) während und gleichzeitig mit der Präsentation der Primärsendung am Empfänger zu präsentieren, wobei das Hinweiszeichen die Verfügbarkeit zu einem zweiten Zeitpunkt später als der erste Zeitpunkt der Sendungszusatzinformation, anzeigt; Mittel (20), die mit dem Datenprozessor verbunden sind, um eine Antwort des Benutzers auf das Hinweiszeichen zu empfangen und Mittel (6, 5, 32), die auf die empfangene Hinweiszeichenantwort an sprechen, um die Aufzeichnungsvorrichtung (30) zu steuern, damit diese die Sendungs-Zusatzinformation zum zweiten Zeitpunkt aufzeichnet.

2. System nach Anspruch 1, wobei mit der Primärsendung Listeninformation für die Sendungszusatzinformation vorgesehen ist, und das System dadurch **gekennzeichnet** ist, daß der Datenprozessor (5) so ausgebildet ist, daß er die Listeninformation in Abhängigkeit von der emp-

fangenen Hinweiszeichenantwort speichert, und die Listeninformation dazu verwendet, die Sendungszusatzinformation mit der Aufzeichnungsvorrichtung (30) aufzuzeichnen, wenn die Sendungszusatzinformation gesendet wird. 5

3. System nach Anspruch 2, weiterhin dadurch **gekennzeichnet**, daß die Aufzeichnungsvorrichtung (30) ein Videokassettenrekorder und der Sendungsempfänger (60) ein Fernsehgerät ist. 10

4. System nach Anspruch 1, weiterhin dadurch **gekennzeichnet**, daß der Datenprozessor (5, 10) so ausgebildet ist, daß er dem Benutzer die empfangene Hinweiszeichenantwort bestätigt. 15

5. System nach Anspruch 1, weiterhin dadurch **gekennzeichnet**, daß der Datenprozessor (5, 10) so ausgebildet ist, daß er dem Benutzer eine Menüanzeige als Antwort auf die empfangene Hinweiszeichenantwort bietet und die Menüwahl des Benutzers empfangen kann. 20

6. System nach Anspruch 1, weiterhin dadurch **gekennzeichnet**, daß das System Mittel (5, 9, 30) zum Erzeugen und Speichern eines Index des aufgezeichneten Materials aufweist. 25

7. System nach Anspruch 6, weiterhin dadurch **gekennzeichnet**, daß das System Mittel (5, 9, 30) zum Aufzeichnen des Index auf einem Band, das das aufgezeichnete Material enthält, aufweist. 30

8. System nach Anspruch 1, das zusätzlich einen Speicher (9) aufweist, der an den Datenprozessor (5) gekoppelt ist, wobei der Datenprozessor (5) so ausgebildet ist, daß er im Speicher (9) Information speichert, die eine lokale Kanalnummer, auf der ein Kabelkanal zugeführt wird, identifiziert. 35

9. System nach Anspruch 1, in welchem die Primärsendung eine Werbung und die Sendungszusatzinformation weitere Details bezüglich des Werbungsgegenstandes sind. 40

10. Verfahren, das eine interaktive Wahl zur Präsentation einer Sendungszusatzinformation zu einer Primärsendung für den Benutzer erlaubt, wobei während und zusätzlich zu der Primärsendung zu einem ersten Zeitpunkt ein Hinweiszeichen gesendet wird, mit den Schritten: 45

Empfangen des Hinweiszeichens und Präsen-

tieren des Hinweiszeichens dem Benutzer an dem Sendungsempfänger (60) während und gleichzeitig mit dem Zeigen der Primärsendung, wobei das Hinweiszeichen das zur Verfügung Stehen zu einem zweiten Zeitpunkt später als der erste Zeitpunkt der Sendungszusatzinformation anzeigt; Empfangen einer Antwort auf das Hinweiszeichen vom Benutzer und Reagieren auf die empfangene Hinweiszeichenantwort, um die Sendungszusatzinformation zum zweiten Zeitpunkt zu empfangen. 50

11. Verfahren nach Anspruch 10, weiterhin **gekennzeichnet** durch das Schaffen der Listeninformation für die Sendungszusatzinformation, die mit der Primärsendung gegeben wird, und der Schritt Reagieren auf die empfangene Hinweiszeichenantwort ein Speichern der Listeninformation und Verwenden der Listeninformation zum Aufzeichnen der Sendungszusatzinformation mit einer Aufzeichnungsvorrichtung aufweist, wenn die Sendungszusatzinformation gesendet wird. 55

12. Verfahren nach Anspruch 10, weiterhin dadurch **gekennzeichnet**, daß für den Benutzer eine Bestätigung der empfangenen Hinweiszeichenantwort geschaffen wird. 60

13. Verfahren nach Anspruch 10, wobei der Schritt Reagieren auf die empfangene Hinweiszeichenantwort die Schritte Schaffen einer Menüanzeige für den Benutzer in Abhängigkeit von der empfangenen Hinweiszeichenantwort, Empfangen der Benutzer-Menüwahl und Empfangen der Sendungszusatzinformation in Übereinstimmung mit der Menüwahl des Benutzers, aufweist. 65

14. Verfahren nach Anspruch 10, weiterhin **gekennzeichnet** durch Erzeugen und Speichern eines Index des aufgezeichneten Materials. 70

15. Verfahren nach Anspruch 14, weiter **gekennzeichnet** durch Aufzeichnen des Index auf ein Band, das das aufgezeichnete Material enthält. 75

16. Verfahren nach Anspruch 10, zusätzlich mit den Schritten Empfangen der Eingabe des Benutzers, die eine lokale Kanalnummer, auf der ein Kabelkanal zugeführt wird, identifiziert und Speichern der lokalen Nummer, auf der ein Kabelkanal zugeführt wird. 80

17. Verfahren nach Anspruch 10, wobei die Sendung eine Werbung ist und die Zusatzinformation weitere Details über den Gegen-

stand der Werbung ist.

18. System, das einem Benutzer von Sendungszusatzinformation, die eine Primärsendung betrifft, eine interaktive Wahl zur Präsentation erlaubt, wobei das System aufweist einen Sendungsempfänger (60), einen Datenprozessor (5), der an die Aufzeichnungsvorrichtung (30) und den Sendungsempfänger (60) angeschlossen ist, dadurch **gekennzeichnet**, daß das System eine interaktive Wahl zur Präsentation von Sendungszusatzinformation, die eine Primärsendung betrifft, an einen Benutzer erlaubt, wobei in der Primärsendung ein Hinweiszeichen zu einem ersten Zeitpunkt mit und zusätzlich zu einem Programm, das die Primärsendung umfaßt, gesendet wird, wobei das System dadurch **gekennzeichnet** ist, daß der Datenprozessor Mittel aufweist, die das Hinweiszeichen am Sendungsempfänger (60) während und gleichzeitig mit dem Präsentieren der Primärsendung präsentieren, wobei das Hinweiszeichen die Verfügbarkeit zu einem zweiten Zeitpunkt später als der erste Zeitpunkt der Sendungszusatzinformation anzeigt; Mittel (20) an den Datenprozessor angeschlossen sind, um eine Benutzerantwort auf das Hinweiszeichen zu empfangen, und Mittel (6, 5) vorgesehen sind, um auf die empfangene Hinweiszeichenantwort zu reagieren, um die Sendungszusatzinformation zum zweiten Zeitpunkt zu empfangen.

5 10 15 20 25 30

1. Système destiné à permettre une sélection interactive pour la présentation à un utilisateur d'une information supplémentaire relative à une diffusion et appartenant à une diffusion primaire, le système comprenant un dispositif d'enregistrement (30), un récepteur (60) de diffusion, et un processeur de données (5) connecté au dispositif d'enregistrement (30) et au récepteur de diffusion (60), caractérisé en ce que le système est destiné à permettre la sélection interactive pour la présentation à un utilisateur d'une information supplémentaire de diffusion appartenant à une diffusion primaire dans laquelle un caractère indicateur est diffusé à un premier moment avec un programme contenant la diffusion primaire et en plus de ce programme, le système étant caractérisé en ce que le processeur de données comporte un dispositif commandé par le caractère indicateur et destiné à présenter le caractère indicateur sur le récepteur de diffusion (60) pendant la diffusion primaire et simultanément à la présentation de la diffusion primaire sur le récepteur (60), le caractère indicateur indiquant la disponibilité, à un second moment ultérieur au premier moment, de l'information supplémentaire de diffusion.

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sion, un dispositif (20) connecté au processeur de données et destiné à recevoir une réponse de l'utilisateur au caractère indicateur, et un dispositif (6, 5, 32) commandé par la réponse reçue au caractère indicateur et destiné à commander le dispositif d'enregistrement (30) pour enregistrer l'information supplémentaire de diffusion au second moment.

2. Système selon la revendication 1, dans lequel une information de programmation de l'information supplémentaire de diffusion est transmise avec la diffusion primaire, le système étant caractérisé en ce que le processeur de données (5) a une configuration lui permettant de mémoriser l'information de programmation à la suite de la réponse reçue au caractère indicateur et pour utiliser l'information de programmation pour l'enregistrement de l'information supplémentaire de diffusion avec le dispositif d'enregistrement (30) lorsque l'information supplémentaire de diffusion est diffusée.

3. Système selon la revendication 2, caractérisé en outre en ce que le dispositif d'enregistrement (30) est un magnétoscope à cassette et le récepteur de diffusion (60) est un poste de télévision.

4. Système selon la revendication 1, caractérisé en outre en ce que le processeur de données (5, 10) a une configuration donnant un accusé de réception à l'utilisateur et indiquant la réponse au caractère indicateur reçue.

5. Système selon la revendication 1, caractérisé en outre en ce que le processeur de données (5, 10) a une configuration donnant un affichage d'un menu à la disposition de l'utilisateur à la suite de la réponse reçue au caractère indicateur et pour la réception des sélections du menu à la disposition de l'utilisateur.

6. Système selon la revendication 1, caractérisé en outre en ce que le système comporte un dispositif (5, 9, 30) de création et de mémorisation d'un index sur la matière enregistrée.

7. Système selon la revendication 6, caractérisé en outre en ce que le système comporte un dispositif (5, 9, 30) pour l'enregistrement de l'index sur une bande comprenant la matière enregistrée.

8. Système selon la revendication 1, comprenant en outre une mémoire (9) couplée au processeur de données (5), le processeur de données (5) ayant une configuration lui permettant de mémoriser l'information identifiant un numéro local du canal sur lequel un canal de câble est transmis à la mémoire (9).

9. Système selon la revendication 1, dans lequel la diffusion primaire est une diffusion publicitaire et l'information supplémentaire de diffusion représente d'autres détails concernant l'objet de la diffusion publicitaire.

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10. Procédé destiné à permettre la sélection interactive pour une présentation à un utilisateur d'une information supplémentaire de diffusion appartenant à une diffusion primaire dans laquelle un caractère indicateur est diffusé pendant la diffusion primaire et en plus de celle-ci à un premier moment, le procédé comprenant les étapes suivantes : la réception du caractère indicateur et la présentation du caractère indicateur à l'utilisateur sur un récepteur de diffusion (60) pendant l'observation de la diffusion primaire et simultanément à cette observation, le caractère indicateur indiquant la disponibilité, à un second moment ultérieur au premier moment, de l'information supplémentaire de diffusion, la réception d'une réponse au caractère indicateur à partir de l'utilisateur, et la réaction à la réponse reçue au caractère indicateur pour la réception de l'information supplémentaire de diffusion au second moment.

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11. Procédé selon la revendication 10, caractérisé en outre en ce que l'information de programmation provenant de l'information supplémentaire de diffusion est incorporée à la diffusion primaire, et l'étape de réaction à la réponse reçue au caractère indicateur comprend la mémorisation de l'information de programmation et l'utilisation de l'information de programmation pour l'enregistrement de l'information supplémentaire de diffusion avec un dispositif d'enregistrement lorsque l'information supplémentaire de diffusion est diffusée.

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12. Procédé selon la revendication 10, caractérisé en outre par la transmission d'un accusé de réception de la réponse reçue au caractère indicateur, vers l'utilisateur.

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13. Procédé selon la revendication 10, dans lequel l'étape de réaction à la réponse reçue au caractère indicateur comprend des étapes de formation d'un affichage d'un menu pour l'utilisateur à la suite de la réponse reçue au caractère indicateur, la réception des sélections dans le menu par l'utilisateur, et la réception de l'information supplémentaire de diffusion en fonction des sélections effectuées dans le menu par l'utilisateur.

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14. Procédé selon la revendication 10, caractérisé en outre par la création et la mémorisation d'un index relatif à la matière enregistrée.

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15. Procédé selon la revendication 14, caractérisé en outre par l'enregistrement de l'index sur une bande

contenant la matière enregistrée.

16. Procédé selon la revendication 10, comprenant en outre les étapes de réception d'un signal d'entrée de l'utilisateur identifiant un numéro de canal local sur lequel un canal câblé est transmis et la mémorisation du numéro local sur lequel est transmis le canal câblé.

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17. Procédé selon la revendication 10, dans lequel la diffusion est une diffusion publicitaire, et l'information supplémentaire donne des détails supplémentaires sur l'objet de la diffusion publicitaire.

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18. Système destiné à permettre une sélection interactive pour la présentation à un utilisateur d'une information supplémentaire de diffusion appartenant à une diffusion primaire, le système comprenant un récepteur (60) de diffusion, et un processeur de données (5) connecté au dispositif d'enregistrement (30) et au récepteur de diffusion (60), caractérisé en ce que le système est destiné à permettre la sélection interactive pour une présentation à un utilisateur d'une information supplémentaire de diffusion appartenant à une première diffusion dans laquelle un caractère indicateur est diffusé à un premier moment avec un programme contenant la diffusion primaire et en plus de ce programme, le système étant caractérisé en ce que le processeur de données comporte un dispositif de présentation du caractère indicateur sur le récepteur de diffusion (60) pendant la présentation de la diffusion primaire sur le récepteur (60) et, simultanément à cette présentation, celle du caractère indicateur indiquant la disponibilité à un second moment ultérieur au premier moment de l'information supplémentaire de diffusion, un dispositif (20) connecté au processeur de données et destiné à recevoir une réponse de l'utilisateur au caractère indicateur, et un dispositif (6, 5) destiné à réagir à la réponse reçue au caractère indicateur pour la réception de l'information supplémentaire de diffusion au second moment.

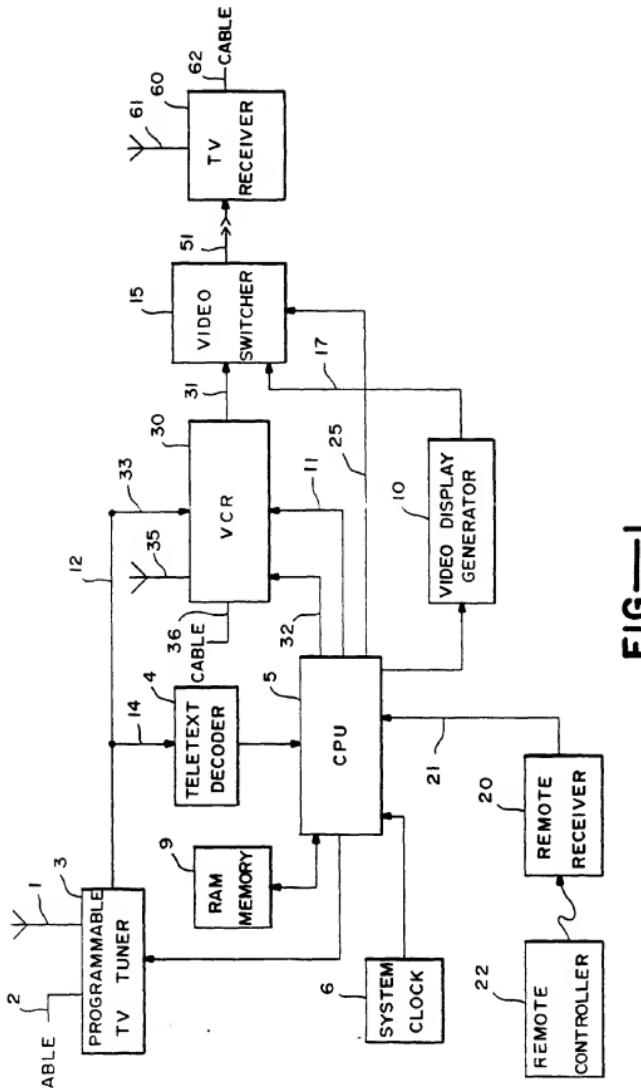


FIG.—I

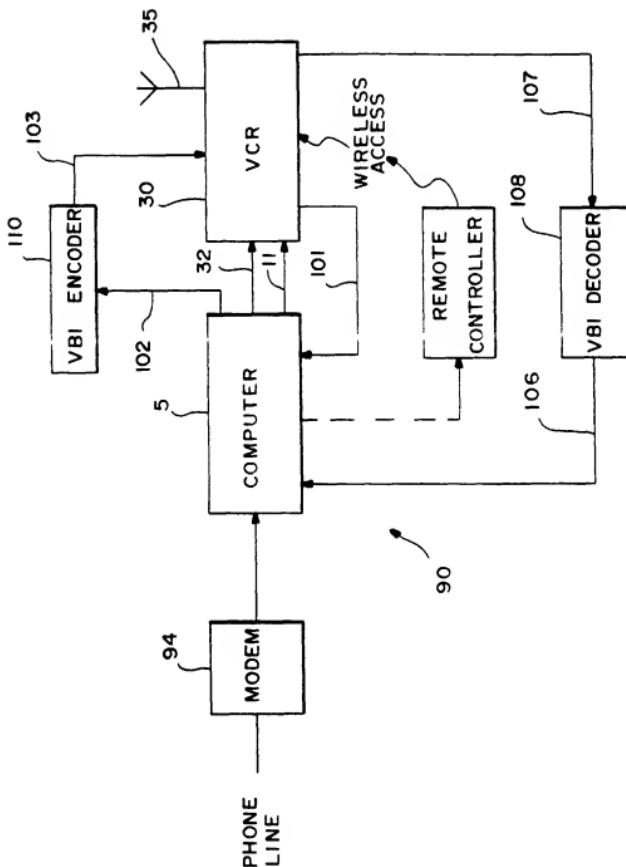


FIG.—2